# QUANTIFYING THE BUSINESS BENEFITS OF TDM

# PROBLEM STATEMENT

Transportation demand management (TDM) is a set of strategies that fosters increased efficiency of the transportation system by influencing travel behavior by mode, time, frequency, trip length, cost or route. Many TDM strategies encourage the use of alternatives to driving alone to help lessen congestion and air pollution. The effectiveness of these efforts depends on employer cooperation and policies supporting these strategies. Employees' use of transit depends on the compatibility of the employer work hour policies and attendance policies such as flextime with transit schedules. The ability of employees to take advantage of advanced traveler information systems to alter arrival and departure times to avoid congested periods depends on those same employer policies. Employer work-life friendly programs, such as compressed workweek programs and telework, reduce traffic and parking demands. Employer parking policies determine the availability and price of parking that influence mode choice by employees. The provision of bike and locker facilities by employers can make the difference between someone choosing to drive or use a non-motorized method.

Public transportation professionals have long believed that TDM provides a variety of benefits to employers. Telework programs can improve productivity, enhance recruitment and retention of employees, and reduce absenteeism. Compressed work week programs enable the employer to expand coverage to enhance customer service. Employers allowing employees to pay for transit passes and parking as a pre-tax benefit save payroll taxes.

The TDM industry must largely depend on the empirical evidence of these TDM strategies implemented by employers. Most of the tool sets available to assess the impacts of TDM programs have focused on the transportation and air quality benefits. These public benefits may have little relevance for most employers unless they were subject to a trip reduction mandate. Ironically, TDM programs target employers to carry out their missions. Therefore, the quantitative evidence of benefits that accrue directly to businesses from a wide range of programs could offer a strong motivation for employers to begin, continue, and/or expand travel alternatives support activities.

# **OBJECTIVES**

The purpose of this research project is to assess past research on and current practices in the area of quantifying the business benefits of public transportation and transportation demand management, and to assemble the various tools that have been used to measure business benefits.

# FINDINGS AND CONCLUSIONS

The review of the efforts to quantify business benefits by employers and agencies points to several clear conclusions and promotes the following recommendations:

1. Increase public sector research and technical assistance efforts to evaluate employer TDM programs for the impacts on business, not only transportation and emission impacts. Businesses attribute benefits to various TDM programs, but no systematic, consistent method of measuring

these benefits exists. In fact, some employers are reluctant to share results because of the perceived competitive advantage TDM provides. This project has compiled various techniques for measuring some of the major benefits of TDM. Establishing a standard methodology for measuring the change across employers would allow for comparison of the relative effectiveness of given strategies, whether or not the information is shared with the outside world. Employers and agencies should be encouraged and supported to use the human-cost approach, tracking costs before the intervention is offered and comparing those with costs measured after the intervention. This is perhaps the easiest approach. Ideally, comparing costs between users and nonusers of the intervention would provide a means of assessing the relative effectiveness.

- 2. Expand the tracking of employer-provided commute benefits to include parking. The Bureau of Labor Statistics tracks subsidized commuting benefits and flexible workplace information. State departments of transportation and groups such as the Association for Commuter Transportation should encourage BLS to add parking (including the employer-provided subsidized parking) benefits to the list. This addition would begin to allow employers to see parking as a benefit rather than a right. Tracking the subsidy amount would increase its visibility as a Selling, General and Administrative cost to the business, and, thus, be controllable.
- 3. Integrate, update, and aggressively distribute the tools to estimate the impacts and costs/benefits of TDM to businesses. Whether the employers implicitly or explicitly quantify the benefits of TDM to their business, the need remains for tools to help quantify the business as well as the community benefits of TDM. The current tools each bring particular strengths and weaknesses. An effort to more closely integrate the tools to assist business would be beneficial. The mere existence of the tools does not mean they are widely used, or even known to exist among the target populations. One tactic would be to provide TDM agencies with a copy of the Business Benefit Calculator javascript program to place on their own websites so the businesses in their areas could find it. It should also allow for the locals to customize the default values to their communities. Another tactic would be to establish self-paced online training programs (e.g., streaming video) to help teach employers and TDM agencies how to use these particular tools.

# **BENEFITS**

This project identifies the key business benefits of TDM and provides techniques for quantifying those benefits. This information should enhance the transportation profession's understanding of the value of TDM to business. An increase in awareness, in turn, should allow agencies to improve levels of employer participation in TDM and other transportation programs and thus provide reductions in congestion and air pollution for Florida and other states.

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